

Appl. No. 10/708,783
Amdt. dated January 23, 2006
Reply to Office action of October 27, 2005

No amendments are made to the claims, and the claims are merely listed for reference.

Listing of Claims:

Claim 1-7 (Canceled).

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Claim 8 (Previously presented): A method for monitoring a machine comprising:

selecting a product wafer running through the machine;
performing a non-destructive detection to the selected product wafer
10 to inspect a plurality of defects;
separating pre-layer defects from defects generated by the machine;
analyzing the defects generated by the machine for killer defects;
if killer defects are present among the defects generated by the
machine, initiating an alarm on the machine; and
15 if killer defects are not present among the defects generated by the
machine, processing a work of the machine.

Claim 9 (Previously presented): The method of claim 8 wherein the step of
separating the pre-layer defects is performed according to a predetermined
20 database, the database comprising a classifying rule of each defect type and
defect information of each defect type.

Claim 10 (Previously presented): The method of claim 9 wherein the defect
information of each defect type comprises an influence degree over a yield
25 of the machine of each defect type.

Claim 11 (Previously presented): The method of claim 8 wherein when
killer defects are detected, the method further comprises following steps:

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performing a root cause analysis according to the defect type of the detected defects; and
informing a responsible person of the machine to correct process parameters of the machine.

5

- Claim 12 (Previously presented): The method of claim 8 wherein the method utilizes inline automatic defect classification (ADC) tools to classify the defects.
- 10 Claim 13 (Previously presented): The method of claim 12 wherein the ADC tools includes databases of defect types of each layer to classify the defects.